



EnerNOC, Inc  
500 Howard Street  
Suite 400  
San Francisco, CA 94105

Tel: 415 343 9500  
Fax: 415 227 1645  
www.enernoc.com  
info@enernoc.com



February 15, 2009

Arizona Corporation Commission  
Docket Control  
1200 W Washington Street  
Phoenix, AZ 85007

RE: Comments of EnerNOC, Inc. in the Proposed Rulemaking on Electric Energy Efficiency Rules

**DOCKET No. RE-00000C-09-0427**

Dear Docket Control Office:

EnerNOC, Inc., respectfully submits the attached comments on the Draft Proposed Energy Efficiency Rules. EnerNOC had submitted these comments in Docket No. E-00000J-08-0314. Since the Proposed Rules under consideration in this docket have not changed from the previous docket, EnerNOC is re-submitting those comments in this proceeding.

I hereby certify that 13 copies of this Notice of Intervention have been mailed to the docket office and that a copy has been sent to the parties of record in this docket.

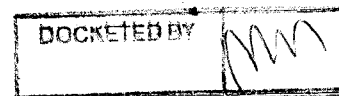
Sincerely,

Mona Tierney-Lloyd  
Sr. Manager Western Regulatory Affairs  
EnerNOC, Inc.  
P. O. Box 378  
Cayucos, CA 93430  
(415) 238 3788

CC: Arizona Corporation Commission (13)  
Lyn Farmer  
Janice Alward  
Ernest Johnson  
Parties of Record

Arizona Corporation Commission  
**DOCKETED**

**FEB 16 2010**



AZ CORP COMMISSION  
DOCKET CONTROL

2010 FEB 16 P 1:53

RECEIVED

## INTRODUCTORY COMMENTS:

EnerNOC is pleased to submit these comments on the Draft Proposed Electricity Energy Efficiency Rules ("Proposed EE Rules").

EnerNOC is a leading provider of clean and intelligent energy services to the electricity industry. EnerNOC's service offerings include demand response, energy efficiency in the form of monitoring-based commissioning (MBCx) and carbon tracking services. EnerNOC has 3,250 MWs of demand response under management through its energy Network Operations Center or NOC. EnerNOC has participated in the workshops leading to the issuance of the Proposed EE Rules and encouraged the Arizona Corporation Commission (ACC) to incorporate demand response and peak load reduction measures as part of the overall goal to reduce Arizona's projected demand for electricity through 2020. EnerNOC believes that peak reduction goals, alongside goals to reduce overall energy consumption, will help the State reduce its growing need for new electricity resources.

First, EnerNOC wishes to applaud the Staff for issuing the Proposed EE Rules. It is obvious that the Staff has put a great deal of thought and effort into the Rules and has been attentive to the comments submitted by the parties. EnerNOC is especially pleased that the Proposed EE Rules include demand response as a means of achieving the overall consumption reduction of 22%. EnerNOC also believes that the goal to reduce energy consumption by 2020 by 22% relative to 2005 sales is an aggressive, but achievable target. The Proposed EE Rules include some reasonable considerations in order to make the goal achievable.

The current annual reduction in consumption due to energy efficiency is approximately 1-2%. The Proposed EE Rules include a table with annual percentage reductions of energy consumption through demand-side management efforts so as to meet the 2020 target.<sup>1</sup> Without efforts to reduce peak demand and consumption, Arizona's energy requirements will double in the next 20 years. Therefore, in order to change its current course, Arizona needs to have more aggressive energy efficiency and peak load management goals.

Arizona is not unique, in that several states have set aggressive energy efficiency and peak load reduction goals.<sup>2</sup> However, in order for Arizona to achieve its targets, it may be necessary to change the emphasis and improve the efficacy of current programs, as was discussed in the workshops. Further, the Proposed EE Rules allow the utilities to take credit for up to 3% of the historical actions taken to reduce consumption prior to the passage of the Rules. Additionally, up to 2% of the total target can come from demand response or load management activities. Therefore, the affected utilities may only need

---

<sup>1</sup> Although, EnerNOC is not clear as to whether the annual percentage savings target assume annual growth.

<sup>2</sup> See EnerNOC's comments submitted in advance of May 20, 2009 Technical Workshop and on June 2, 2009.

to increase their overall energy efficiency reductions by 15% to 16%<sup>3</sup> over the next ten years which is an average of 1.5% to 1.6% per year. EnerNOC also believes that the availability of energy-related technologies and the potential for smart grid advancements will make it possible to reduce consumption and improve efficient use of energy beyond what has been possible in the past. EnerNOC offers one such service, Monitoring-Based Commissioning (MBCx) where continuous monitoring of HVAC and lighting systems can uncover low or no-cost recommendations that, if undertaken by the customer, can reduce system inefficiencies and result in energy savings.

### **SPECIFIC COMMENTS RELATIVE TO THE PROPOSED EE RULES:**

EnerNOC has the following specific comments to offer relative to the draft rules. These comments focus on the following areas:

1. The demand response cap of 2%.
2. The omission of language encouraging or allowing third-party service providers for energy efficiency, demand response or load-management services.
3. Encouragement to the Commission to hold workshops or take comments on the very important issue of measurement and verification so as to establish a baseline from which performance is measured.

#### **The Demand Response Cap of 2%**

EnerNOC appreciates the Commission including up to 2% of the 22% target from demand response and load management services. However, EnerNOC is concerned that the Proposed EE Rules may overly restrict the affected utilities' ability to incorporate demand response into their overall portfolio planning by limiting the amount of demand response that will count toward the overall energy efficiency goal. As stated by EnerNOC in its comments filed earlier in this docket, a modest goal of 0.5% per year, resulting in a total peak demand reduction of 5% by 2020 would be more in line with the goals established by other state commissions. Even APS had proposed that 3% of the overall energy efficiency goal would come from demand response. Therefore, 2% is lower than any position presented during the workshops. EnerNOC would suggest that the Commission consider establishing a range of demand response or load management contributions of no less than 2% and up to 5%.

It is not clear from the rule if the 2% cap on demand response would be required to come from new measures or if they could be met by existing measures. In other words, would the affected utilities be able to count existing programs toward the 2% demand response and load management cap and therefore, not have to undertake any additional peak load reduction measures. If that is the case,

---

<sup>3</sup> 22% Goal-3% historical efforts-2% demand response or load management-(1% to 2%) existing EE annual reductions.

EnerNOC would be concerned that there would not be an adequate incentive to reduce peak demand.

EnerNOC understands the importance of using a representative load factor to translate peak load reductions, measured in MWs, into annual energy savings, measured in MWhs. The use of a 50% load factor adjustment will ensure that reductions resulting from demand response measures will be given the appropriate credit relative to other energy efficiency decisions. However, that same conversation factor may limit the amount of peak demand reductions that the affected utilities would achieve.

For example, if 2% of an affected utility's total reduction goal was 100,000 MWhs, by using a 50% LF, the affected utility would only need to target just under 23 MWs of peak load reductions. However, if the LF was 25%, the load reduction target would be slightly over 45 MWs. Therefore, a higher load factor would correspond to a higher reduction in annual consumption, but reduce the peak load reduction result. As stated earlier by EnerNOC in comments, it is important to maintain the credibility of either energy or demand savings so that results are verifiable and measurable. Whenever a conversion is necessary, the choice of the conversion factor will be controversial. While EnerNOC is proposing that the demand response cap be raised to 5%, the Commission may also consider establishing a separate peak-load reduction target which may be structured as follows:

1. Consider separating the demand response target from the energy efficiency target such that the Commission has set both a peak load reduction target of 5% and an energy efficiency target of 17%; or,
2. Clearly state that in meeting the 22% reduction in annual consumption, the affected utility must demonstrate that their actions have also resulted in a reduction of the peak demand requirements by at least 5%.

It is EnerNOC's strong opinion that without peak load reduction goals, to which utilities plan their supply portfolios, Arizonans will not see as great a reduction in their costs of electricity. Utilities want to ensure that they have adequate supplies, plus a reserve margin, to meet an expected system peak. It is possible that some supplies are only used during these peak periods and then for the balance of the year, not at all. Studies have shown that for some utilities, 10% of the resources are used to meet 1% of the demand. As such, reducing the peak demand makes extraordinary economic sense because a reduction in the peak demand can defer the need to purchase or build an incremental resource. If the incremental resource is a power purchase, the deferral could be at a time when the price for the incremental resource is at a premium.

FERC has recognized, through Order 719, the value of demand in mitigating generator market power and also mitigating market clearing prices. EnerNOC has

offered demand response programs to utilities that are used as a resource for resource adequacy purposes and for deferring incremental purchases. The programs are reliable. With 121 events in 2009, EnerNOC's average event performance has been 102%. Demand response can foster an appreciation in customers for efficient use of electricity and may lead to customers implementing other energy conservation measures.

While energy efficiency and peak demand reductions are complimentary, they do accomplish different objectives. Reducing annual consumption will provide some reduction in peak requirements, but not as effectively as a demand-response program.

Demand response provides economic stimulus to both participating customers and non-participating customers. Participating customers are paid for their demand response, as if they were a resource. In these difficult economic times, any ability to reduce expenses is critical to businesses. Participating customer are not the only beneficiaries, however. Non-participating customers benefit by demand response lowering the overall costs, or dampening the increase in energy costs, by deferring the need for new investment or for incremental power purchases.

### **Third-Party Service Providers**

While utilities can be very effective at designing and administering their own programs, EnerNOC would suggest that the Commission encourage the utilities to seek proposals from third-party energy service companies, like EnerNOC. EnerNOC would like to point out that the definition of energy service company does not currently include demand response providers. Nor do the rules encourage the affected utilities to seek the services of energy service companies or third-party providers, such as EnerNOC, as potentially offering the most cost-effective services by which to meet the targets.

There are usually two models: build it or buy it. Every utility must make its own decisions as to which is the best answer for the organization. However, at a minimum, the utilities should know that if they choose a cost-effective third-party solution, that the Commission will evaluate the merits of those programs without prejudice for utility-developed and administered programs.

Therefore, EnerNOC respectfully requests that the Commission makes clear in the Final Rules that the utility can bring forward either cost-effective utility or third-party programs for consideration as part of the DSM plan submission.

### **Measurement & Verification:**

Measurement and verification is probably the single most important aspect to any demand response or energy efficiency program design. As part of the Proposed

EE Rules, the affected utilities would submit DSM Program Plans that would include an estimate of the baseline (R.14-2-2407 C. 5.).

EnerNOC would suggest, especially as it relates to demand response, that the Commission hold workshops to allow parties to submit proposals relative to the methodology of estimating the baseline. In that way, the Commission can determine the methodology it will accept for purposes of measuring demand response or energy efficiency performance in advance of the affected utilities filing their DSM Program Plans.

Estimating baselines tends to be the most controversial aspect to a DSM Program Plan. It would be more constructive to have the Commission identify the methodology it will accept and have the utilities submit conforming Program Plans rather than to have each utility submit its own baseline estimation methodology.

## **CONCLUSION:**

EnerNOC appreciates the efforts of Staff in developing the Proposed EE Rules. EnerNOC respectfully requests the rules be modified in the following ways:

1. Increase the cap on demand response as a percentage of total energy efficiency reductions from 2% to 5% or a range of 2% to 5%.
2. Alternatively, implement a separate peak-load reduction target of 5% and an energy efficiency target of 17%; or, require that the 22% reduction in annual consumption also produce a reduction in peak load requirements of 5%.
3. Clarify whether the peak load reduction of 2% will be for existing or incremental peak load reduction measures.
4. Examine the implications of a 50% load factor to reducing the opportunity for peak load reductions.
5. Explicitly include third-parties or energy service companies, including demand response providers, as a means for the utility to satisfy the DSM targets.
6. Hold workshops and have the Commission determine the baseline methodology in advance of utilities submitting their DSM Program Plans.